

GUREVICH, Yu.K.; KAMPHITSKIY, I.S., LITVAK, P.L.

Treatment of syphilis without the use of arsenic [with summary in English]. Vest.derm. i ven 32 no.4:42-45 J1-Ag '58 (MIRA 11:10)

1. Is Odesskogo oblastnogo kozhno-venorologicheskogo dispansera (glavnyy vrach I.N. Koltun).

(SYPHILIS, ther.

nonarsenical combined ther. (Rus))

KAMENSKIY, Yu. A.

Equivalent circuits of crystal triodes. Poluprov. prib. i ikh prim.
no.2:78-141 '57. (MIRA 11:6)
(Transistors)

NERSEYAN, Mikhail Grigor'iyevich; KAMENTSEVA, Yuiya Vladimirovna;

[Armored equipment of the armies of capitalist countries]
Bronetankovaya tekhnika armii kapitalisticheskikh gosudarstv.
Moskva, Voenizdat, 1964. 422 p. (MIRA 17:11)

KAMENSOV, A.; KHANIN, M.; KUCHERENKO, A.; TISHCHENKO-RAYEVSKIY, Ye.

Overall continuous flow line. Avt.transp. 41 no.4:22-24 Ap '63.
(MIRA 16:5)

1. Kiyevskiy taksomotornyy park No.1.
(Kiev---Taxicabs---Maintenance and repair)

KAMENYEVA, V.
~~Scientist~~

P.P.Kopniaev, an outstanding Russian scientist. Visnyk AN URSR 24 no.9:58-65
S '53. (MIRA 6:10)

(Kopniaev, Pavel' Petrovich, 1867-)

KAMENYUKA, Ya.

Simplest design of a steam-producing unit. Sil'.bud. 10
no.5:22 My '60. (MIRA 13:7)

1. Starshiy inzhener upravleniya stroitel'stva Luganskogo
oblastnogo upravleniya sel'skogo khozyaystva.
(Autoclaves) (Tiles, Roofing)

KAMEONSKIY, L. M.

RYZHKOV, D., redaktor; KHRUSHCHOV, M.M., doktor tekhnicheskikh nauk,
professor, redaktor; KAMEONSKIY, L.M., inzhener, redaktor.

[Economy and substitution of non-ferrous metals] Ekonomika i za-
mena tsvetnykh metallov. Otvetstvennyi redaktor D. Ryzhkov.
Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit.
lit-ry, 1953. 303 p. (MIRA 7:7)
(Non-ferrous metals) (Machinery industry)

PROCESSING AND PROPERTIES INDEX

112

Wild species of potatoes as initial material in selective breeding. A. Ya. Kamerat. *Soviet Plant Ind. Record* 4, 13-20 (in English; 201(1940)). The wild species of potatoes from Central and South America have been shown to be very valuable for breeding work. Among these species are found forms highly resistant to frost. Many species are phytophthora- or wart-resistant, however, these two qualities rarely come together. Several species are found to be immune to the potato bug. Some wild species excel the cultivated forms in vitamin C content, especially some varieties of the species *Solanum antipovianum*. The majority of wild species have a very high content of dry matter in their tubers. The highest value is found in *S. antipovianum* (38.00%). The nitrogenous compounds, especially protein, are very high. Thus the groups Demissa, Acaulia and Longipedicellata have about 4.5-5.0% of crude protein, as compared with the 2.5% in the best cultivated varieties. Most of the wild forms are also rich in starch (when detd. by the sp. gr. method). While the content varies with conditions, the value of 20-25% is shown by many forms. The tubers of most wild forms are not at all, or only a little, darkened in air. Of the undesirable qualities the most important to be overcome is the tendency to degenerate under conditions of growth in foreign lands. Scanty tuber formation, unpleasant flavor and pigmentation are other defects, which are dominant also in the first generation of crossed forms. Hybridization has yielded some excellent results with Demissa, Acaulia and Longipedicellata. By repeated crossings with cultivated varieties the undesirable qualities have been eliminated. References. C. S. Shapiro

ASAC 55.4 METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS		PROCESS AND PROPERTIES INDEX		COMMON VARIANTS INDEX	
<p><i>ta</i></p> <p>Inheritance of the chemical composition of tubers in interspecies hybridization of potatoes. S. M. Prokushkev and A. Ye. Kamenaz. <i>Soviet Plant Ind. Record</i> 4, 51-60 (1941).—Preliminary report. The following conclusions are given as results of the biochem. analysis of tubers of hybrids: (1) When species with high and low dry matter content are intercrossed, the av. values in the first generation are intermediate between those of the parents, forms with very high values being thus eliminated. (2) Intercrossing of species with high and low crude protein content gives two types of heredity: (a) low protein values dominate in crossing select species with <i>Solanum andigenum</i>; (b) intermediate inheritance is obtained in crossing select forms with <i>S. demissum</i>. (3) In crossing species with high and low starch values the intermediate inheritance is again evident, since the percentage of starch (sp. gr. method) is the av. of the parental values and is closer to the low content form. Thus the high starch content of one of the parents (usually the wild species <i>S. demissum</i> and <i>S. molinae</i>) is eliminated. In all cases of interspecies crossing the proper selection of the components of one of the parents (the cultivated form <i>S. tuberosum</i>) is of primary importance whatever the other parent (wild species) may be. These conclusions are preliminary in character, and need to be further checked and extended by analytical investigations. C. S. Shapiro</p>		<p>111</p>		<p>111</p>	
<p>ASAC-3LA METALLURGICAL LITERATURE CLASSIFICATION</p>					
<p>FROM: 277-88149</p>					
<p>SEARCHED: 11/10/41</p>					
<p>INDEXED: 11/10/41</p>					
<p>FILED: 11/10/41</p>					
<p>11/10/41</p>					

KAME AZ, A.YA

25838 Poluchenie khozyaystvennotsennykh fitoffroustoychivyykh form karto-
felya pri gibridizatsiii dikogo vida Solanum demissum skul'turnym vidom s.
Tuberosu. Trudy po prikl, botanike, genetike i selektsii Vsesoyuz in-t
rastenievodstva), t. XXVIII, vyp. 2, 1949, s. 19-44, Bibliogr: 13 Nazv.

SC: Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

KAMERAZ, A. YA.

25839

Khozyaystvennye kachestva novogo kul'turno go polimorfnogo vida kartofelya
Solanum andigenum Juzet buk. Trudy po prikl. Botanike, genetike i selektsii.
(Vsesoyuz, in-t rastenievodstva), T. XXVIII, vyp 2, 1949, s. 57-70.

SO: Letopis' No. 34

KAMERAZ, A. Ya.

Kvadratno-gnesdovaya posodka kartofelya (The square hill system of planting potatoes, by) M. G. Doganovskiy (1) A. Ya. Kameraz. Leningrad, Lenizdat, 1953. 25 p. illus., diagsr.

N/5
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KAMERAZ, A. YA.

Agricultural engineering methods in obtaining high potato yields. Moskva, 1954. 191 p.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000620310008-1

U S S R .

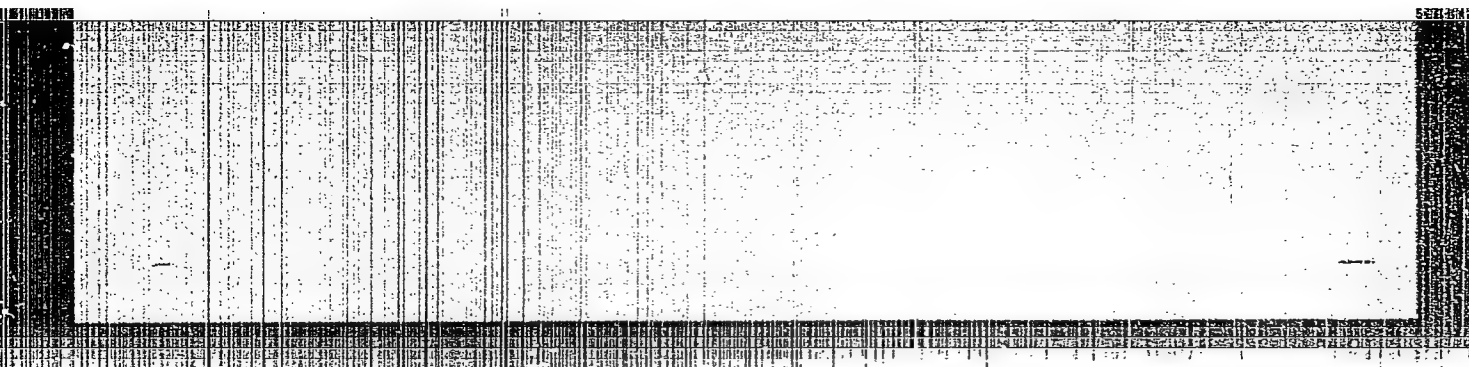
... of ... with a high crude-protein content for

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CIA-RDP86-00513R000620310008-1"

ALEKSANDROV, Sergey Vasil'yevich, kandidat sel'skokhozyaystvennykh nauk;
BELYAYEV, Anton Semenovich; VASIL'YEV, Vasilii Luk'yanovich, kandidat
sel'skokhozyaystvennykh nauk; KAZAKOVA, Antonina Alekseyevna, kandidat
sel'skokhozyaystvennykh nauk; KAMERAZ, Abram Yakovlevich, kandidat
sel'skokhozyaystvennykh nauk; SECHKAREV, Boris Ivanovich, kandidat
sel'skokhozyaystvennykh nauk; BREZHNEV, D.D., professor, doktor
sel'skokhozyaystvennykh nauk, redaktor; PETROV, N.P., redaktor;
CHUHAYEVA, Z.V., tekhnicheskii redaktor

[Vegetable gardening]Ovoshchevodstvo. Pod red. D.D.Brezhneva. Moskva,
Gos. izd-vo selkhoz. lit-ry, 1956. 472 p. (MIRA 9:12)
(Vegetable gardening)

Kameraz, A.Ya.
USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10782

Author : Kameraz, A.Ya.

Inst : -

Title : Potato Selection for Resistance to the Colorado Beetle.

Orig Pub : Kartoffel', 1957, No 1, 31-36

Abstract : This is a short survey of the work being done on development potato varieties for resistance to the Colorado beetle, primarily by means of crossing *Solanum tuberosum* with various species of the *Glabrescentia* series. There is a discussion of problems of hybridability (in particular of the application of experimentally derived tetraploid forms as one of the components of the crossbreeding), the results achieved, and the prospects for deriving economically valuable potato varieties from this crossbreeding.

Card 1/1

COUNTRY : USSR
 CATEGORY : CULTIVATED PLANTS. Potatoes. Vegetables.
 ABS. JOUR. : REF ZHUR : BIOLOGIYA, NO. 4, 1959, No. 15649
 AUTHOR : Kamerz, A.Ya.
 INST : All-Union Plant Cultivation Inst.
 TITLE : New Development in Selection of Potatoes for Resistance to Late Blight.
 ORIG. PUB. : Byul. Vses. in-ta rasteniyevodstva, 1957, No.3, 19-24

ABSTRACT

The research was done over many years at the Pushkin laboratories of the All-Union Plant Cultivation Inst. It was determined that study of the initial material and hybrids in relation only to the ordinary strains of fungus is inadequate. Evaluation of selection material in the field is unreliable, since the degree of disease can be varied in different years. It is therefore essential to carry out artificial infection

CARD: 1/3

58

APPROVED FOR RELEASE: 08/10/2001
 CULTIVATED PLANTS. NO. 4, 1959
 ABS. JOUR. : REF ZHUR : BIOLOGIYA, NO. 4, 1959, No. 15649
 AUTHOR :
 INST :
 TITLE :

AUTHOR :
 INST :
 TITLE :

ORIG. PUB. :

ABSTRACT

of the leaves and tubers of the tested forms. For the proper selection of pairs in their resistance to ordinary late blight, it is necessary to carry out, at every stage of crossing, a selection of the most resistant forms in leaf and tuber. The non-resistant seedlings are scrapped before transplanting in the ground. Before planting out in the ground, the seedlings that have survived infection are sprinkled with Bordeaux mixture.

CARD:

2/3

CARD.

3/3

USSR / Virology--Plant Viruses

E

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 94830

Author : Kameraz, A. Ya., Shcherbakova, N. I.

Inst : Not given

Title : S Virus and Results of Its Determination by Serological Method in Potato Leaves

Orig Pub: Vestn. s.-kh. nauki, No 12, 93-100

Abstract: Described is the Van Slogteren "micro-reaction" method, somewhat changed by the authors, for the serological diagnosis of potato S-virus. By means of this reaction, S-virus was found in potato plants of different varieties with the exception of the Vyrypayevskiy, Kameraz No 1, Lorkh,

Card 1/2

BREZHNEV, D.D., akademik, prof.; GAZENBUSH, V.L.; KAMERAZ, A.Ya.;
MEDVEDEV, P.F.; MIZGIREVA, O.F.; FILOV, A.I.; ZHUKOVSKIY, P.M.,
akademik, prof., obshchiy red.; LEONT'YEV, V.M., red.; CHUNA-
YEVA, Z.V., tekhn.red.

[The flora of cultivated plants of the U.S.S.R.] Kul'turnaya
flora SSSR. Moskva, Gos.izd-vo sel'khoz.lit-ry. Vol.20.
[Vegetable plants of the nightshade family: tomato, eggplant,
black nightshade, melon pear, pepper (Capsicum), ground cherry,
mandragora] Ovoshchnye paslenovye; tomat, baklazhan, chernyi
paslen, dynnya grusha, perets, fizalis, mandragora. 1958.
531 p. (MIRA 13:3)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (for Brezhnev, Zhukovskiy).
(Nightshade) (Vegetables)

BUKASOV, Sergey Mikhaylovich; KAMERAZ, Abram Yakovlevich

[Principles of potato breeding] Osnovy selektsii kartofelia.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 527 p.

(MIRA 13:3)

(Potatoes)

KAMERAZ, A., doktor sel'skokhoz. nauk

Immunity of potatoes to diseases. Zashch. rast. ot vred. i
bol. 10 no.10:7-9 '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut
rasteniyevodstva.

KAMERDIN, L.K.

KAMERDIN, L.K.

Repairing pistons of pneumatic hammers. Mashinostroitel' no.9:38
8 '57. (MLRA 10:9)

(Pistons--Repairing)

KAMERDIN L.K.

AUTHOR: Kamerdin, L.K. and Orlov, F.D. 117-58-5-11/24

TITLE: Equipment for Cutting Straight-toothed Racks (Prisposobleniye dlya narezaniya pryamozubykh reyek)

PERIODICAL: Mashinostroitel', 1958, Nr 5, pp 27 - 28 (USSR)

ABSTRACT: The usual method of cutting teeth in straight racks is by use of combs. Their disadvantage is a poor efficiency due to low cutting speed and the necessity of repeated adjustments of blanks in case of long racks. The authors propose a new method, using for this purpose the gear shaper 5A150 of the Yegoryevskiy plant "Komsomolets" and special equipment which consists of a box-shaped frame fixed to the gear shaper as shown in figure 1. The top of the frame consists of 2 parts, a stationary and a sliding one. In the sliding part, a groove is cut to support the blank which is fixed by 4 bolts. An ordinary cutter is used for cutting teeth. The rotation of the table transmits the movement to the sliding blank support by means of a worm. For correct cutting it is necessary that the working speed of cutter and movement of the blank are synchronized. An imaginary pinion with a determined number of teeth, for which adequate adjustment must be set up, corresponds to every rack of

Card 1/2

Equipment for Cutting Straight-toothed Racks

117-58-5-11/24

a certain module to be cut. Under "imaginary pinion" is understood an additional worm, which imparts to the blank support the required speed. If the pitch of the rack is to be changed, either the diameter of the worm or the number of teeth for the set up must be changed. Since the diameter of a pinion can not be changed, it is advisable to choose a diameter (for instance 420 mm) which, with a set of interchangeable pinions, offers a variety of modules. There is 1 figure.

AVAILABLE: Library of Congress

Card 2/2 1. Gear cutting machines-Attachment-Operation

I 11966-66 EWT(n) DIAAP

ACC NR: AP8001146

SOURCE CODE: UR/0367/65/002/003/0415/0422

AUTHOR: Kamerdzhiyev, S. P.

ORG: None

TITLE: Effective quadrupole charge in nuclei

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 415-422

TOPIC TAGS: quadrupole moment, nucleon, transition probability, matrix element, particle interaction

ABSTRACT: The concept of effective polarization charge is widely employed in nuclear calculations. For example, in the "pairing + quadrupole forces" model, only the levels of the unfilled shells are explicitly calculated; the quadrupole polarization of the core of the nucleus by external nucleons is calculated by assigning the effective charges $e_{\text{eff}}^{\text{p}}$ and $e_{\text{eff}}^{\text{n}}$ to the nucleons of the unfilled shells. In the method of interacting particles the constant e_{ff} does not have to be introduced. Using this method, the author writes and solves an equation for e_{eff} so that the latter can be expressed via universal constants describing quasi particle interaction, and thus gives a microscopic treatment of the effective quadrupole charge. In addition, this

Cont: 1/2

L 11966-66

ACC NR: AP6001145

approach permits him to study of the dependence of ϵ_{eff} on the state, frequency, and atomic number, and to check the degree of accuracy of the approximation $\epsilon_{\text{eff}}^p = 2$, $\epsilon_{\text{eff}}^n = 1$. The matrix elements of single-particle low-energy F2-transitions in certain nuclei are calculated. Author thanks A. E. Migdal and E. Ye. Sapershteyn for reviewing the results and for attention to the work, and S. V. Khudyakov and V. A. Belyakov for their substantial assistance in computer calculations. Orig. art. has: 1 table and 21 formulas.

SUB CODE: 20/ SUBM DATE: 08Mar65/ ORIG REF: 005/ OTH REF: 012

(Signature)

Card 2/2

ZOBNIN, V.; KAMERILOV, V., inzh.-konstruktor

The "Tula-200K" motor scooter. Za rul. 20 no.4:19 Ap '62.
(MIRA 15:5)

(Motor scooter)

LOTOTSKIY, Aleksey Vladimirovich, inzh.; ZOBIN, Vladimir Andreyevich,
inzh.; KAMERILOV, Vladimir Konstantinovich, inzh.; SHMELEV,
Oleg Filippovich, inzh.; GINTSBERG, M.G., red.; NAKHIMSON, V.A.,
red.isd-va; KL'KIND, V.D., tekhn.red.

[Freight motor scooters] Gruzovye motorollery. Moskva, Gos.
nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1961. 163 p.
(Motor scooters) (MIRA 14:4)

LOTOTSKIY, A.V., inzh.; ZOBININ, V.A., inzh.; KAMERILOV, V.K., inzh.;
SHMELEV, O.P., inzh.; KASPEROVICH, N.S., red.izd-va;
EL'KIND, V.D., tekhn. red.

[Catalog of spare parts for "Tula" T-200 and T-200 M motor
scooters] Katalog zapasnykh chastei motorollerov "Tula" T-200
i T-200M. Moskva, Mashgis, 1962. 65 p. (MIRA 16:5)

1. Russia (1917- R.S.F.S.R.) Tul'skiy ekonomicheskiy admini-
strativnyy rayon. Sovet narodnogo khozyaystva.
(Motor scooters--Catalogs)

S/081/62/000/024/040/052
B106/B186

AUTHORS: Vasil'yeva, M. N., Kamerina, T. P., Komarova, Ye. I.,
Zhestkova, Ye. N., Maslova, M. F., Smirnova, Ye. V.,
Ivanov, N. N., Bikbayeva, N. S., Koptayeva, V. A.

TITLE: Choice of a new oiling agent for processing capron in
synthetic fiber plants

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24 (II), 1962, 947,
abstract 24P979 (Nauchno-issled. tr. Tsent. n.-i. in-t
shelk. prom-sti. M., Rostekhzdat, 1960 (1962), 82-94)

TEXT: On the basis of the results obtained in the testing of new oiling
agents the authors recommend that 2.5 - 4.5% of the type K-160 (-160)
should be applied to the fiber. The oiling agent consists of 82%
Velosite 2(L), 6% ON-4 (OP-4) and 6% Stearoks-6. Twisting is to be
stabilized by low-pressure steaming. [Abstracter's note: Complete
translation.]

Card 1/1

KAMERLOKH, N.A., inzh.; ROZENFEL'D, L.M., kand. khim. nauk; BEREZIN, N.N.,
inzh.

High-strength cementless gas concrete made with slag and fly
ash. Stroi. mat. 10 no.7:34-36 J1 '64 (MIRA 18:i)

KAMERNITSKIY, A.V.

FD-1511

USSR/Chemistry

Card 1/1 : Pub. 129-14/18

Author : Kost, A. N.; Kamernitskiy, A. V.; Gurvich, S. M.

Title : Synthesis of 2,2-pentamethylenepyrrolydine

Periodical : Vest. Mosk. un., Ser. fizikomat i yest. nauk, 9, No 6, 115-118, Sep 54

Abstract : Describes synthesis of the above new spirane. Synthesis consists of reducing the cyanoethylated nitrocyclohexane. Gives a convenient method for the preparation of gamma₁gamma-dicyanopimelonitrile. Eight references (Three USSR)

Institution : Chair of Organic Chemistry

Submitted : January 7, 1954

KAMERNITSKIY, A.V.

A preparative method for the synthesis of cyanohydrins. I. N. Nuzinov, A. A. Akhrem, and A. V. Kamernitskiy. *Int. Org. Chem. Acad. Sci. U.S.S.R., Moscow*. *Zhur. Obshch. Khim.* 25, 1315-1316 (1955). A convenient synthesis of cyanohydrins was developed based on exchange reaction of $\text{Me}_2\text{C}(\text{OH})\text{CN}$ (I) with other ketones and aldehydes. The yields of the products depend on the soly. and discom. constants of the products. Thus, I, b, 65-70°, n_D^{20} 1.400 (17 g.), and 11.4 g. $\text{Me}_2\text{C}(\text{OH})\text{CN}$ mixed with 5 ml. $\text{MeOH-K}_2\text{CO}_3$, kept overnight at 20°, then slightly acidified with H_2SO_4 to Congo red, distd. at 55-60° to remove MeOH and Me_2CO , treated with 7 ml. catalyst soln. and again kept overnight, gave the distn. 18.5 g. $\text{Me}_2\text{C}(\text{OH})\text{CN}$, still contaminated with the starting material (distn. was ineffective). I (51 g.), 22.8 g. Pr_2CO , and 25 ml. $\text{MeOH-K}_2\text{CO}_3$ allowed to react as above (in 2 steps) gave 15.8 g. $\text{Pr}_2\text{C}(\text{OH})\text{CN}$, b, 64-65°, n_D^{20} 1.4338, d_4^{20} 0.9340. $\text{Iso-Pr}_2\text{CO}$ (22.8 g.) heated with 51 g. I and 25 ml. $\text{MeOH-K}_2\text{CO}_3$ 5 hrs. at 65-70°, the mixt. kept overnight at 20°, acidified and distd. gave a residue of 20 g. $\text{iso-Pr}_2\text{C}(\text{OH})\text{CN}$, m, 29-30°. $\text{AcCH}_3\text{CO}_2\text{Et}$ (39 g.), 70.5 g. I, and 40 ml. $\text{MeOH-K}_2\text{CO}_3$ kept overnight at 20°, acidified and evapd. *in vacuo* gave 30.6 g. Et acetate cyanohydrin, b, 67.5-68°, n_D^{20} 1.4338, d_4^{20} 1.0523. PrCHO (18 g.), 66.75 g. I, and 20 ml. $\text{MeOH-K}_2\text{CO}_3$ kept overnight at 20° gave 20.4 g. $\text{PrCH}(\text{OH})\text{CN}$, b, 73-74°, n_D^{20} 1.4220, d_4^{20} 0.9397. Similarly 20 g. EtCHO and 85 g. I with 50 ml. $\text{MeOH-K}_2\text{CO}_3$ gave 29 g. $\text{EtCH}(\text{OH})\text{CN}$, b, 62-63°, n_D^{20} 1.4161, d_4^{20} 0.9610. I (43.5 g.) and 43 g. 35-75% formalin with 0.5 g. K_2CO_3 in 5 ml. H_2O kept overnight at 0°, acidified, evapd. and extd. with Et_2O gave 20 g. $\text{CH}_2(\text{OH})\text{CN}$, b, 77-78°, n_D^{20} 1.4208; paraformaldehyde (13.2 g.) and 34 g. I at 40-50° were treated with 10 ml. $\text{MeOH-K}_2\text{CO}_3$, kept 1.5 hrs. at 20° and acidified, evapd. and extd. with Et_2O to yield 18.1 g. $\text{CH}_2(\text{OH})\text{CN}$, b, 76.5-77°, this with concd. HCl enters a vigorous reaction and yields after heating 5 hrs. on a steam bath glycolic acid. BzH (31.8 g.) and 25.5 g. I with 10 ml. $\text{MeOH-K}_2\text{CO}_3$ kept overnight gave, after usual treatment, 35.8 g. $\text{PhCH}(\text{OH})\text{CN}$, which could not be recrystd. successfully; with concd. HCl this readily gave mandelic acid. Cyclohexanone (75.4 g.) and 190 g. I

with 20 ml. $\text{MeOH-K}_2\text{CO}_3$ after standing overnight at 20° gave 83.6 g. $(\text{CH}_2)_5\text{C}(\text{OH})\text{CN}$, m, 34-35°, which with concd. HCl gave 1-hydroxycyclohexanecarboxylic acid, m, 108-109°. Et_3N or piperidine catalysts gave the same result at 0.01 mole per 1 mole I. 1-Methylcyclohexanone (22.4 g.) and I similarly gave 25.1 g. 1-methylcyclohexanone cyanohydrin, b, 92.5-93.5°, n_D^{20} 1.467, which on freezing gave 1 isomer, m, 53.5-54°, and another isomer, m, 59-60°, n_D^{20} 1.4671. 1-Methylcyclopentanone (4.9 g.) similarly gave 4.4 g. corresponding cyanohydrin, b, 85-86°, n_D^{20} 1.4602. Similarly 12.8 g. 2,2-dimethyltetrahydro-4-pyranone gave 10.1 g. cyanohydrin, m, 88-89°, while 14.1 g. 1,2,5-trimethyl-4-piperidone gave 16.6 g. cyanohydrin, m, 127-128°, from aq. soln. of I without a catalyst. Similarly 1,3-dimethyl-4-piperidone and I gave the cyanohydrin, m, 84.5-85°. 1-trans-Decalidone and I required the use of $\text{MeOH-K}_2\text{CO}_3$ and gave about 55% cyanohydrin, m, 80.5-81.5°. Also in *J. Gen. Chem. U.S.S.R.* 25, 1291-5 (1955) (Engl. translation). C. M. Kozlovskiy

KAMERNITSKIY, A. V.

A. A. Akhrem, A. V. Kamernitskiy, G. V. Aleksandrova, and I. N. Nazarov (deceased), "Stereochemistry of Some Addition Reactions in Multiple Bonds."

report presented at the Symposium on Concepts of Conformation in Organic Chemistry which took place in Moscow at the IOKh AN SSSR (Institute of Organic Chemistry, AS USSR) from September 30 to October 2, 1958.

Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1959, No. 3, 561-564.

KAMERNITSKIY, A. V.: Master Chem Sci (diss) -- "The stereochemistry of the reactions of a nucleophilic addition to the carbonyl group of cyclic ketones".
Moscow, 1958. 16 pp (Acad Sci USSR, Inst of Organic Chem im N. D. Zelinskiy),
185 copies (KL, No 4, 1959, 121)

62-58-5-17/27

AUTHORS: Nazarov, I. N., Akhrem, A. A., Kamernitskiy, A. V.

TITLE: Stereochemistry of Nucleophilic Addition to Carbonyl-Group
Reactions of the 2-Methylcyclohexanone(Stereokhimiya
reaktsiy nukleofil'nogo prisoyedineniya po karbonil'noy gruppe.
Reaktsii 2-metiltsiklogeksanona)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk,
1958, Nr 5, pp. 631 - 633 (USSR)

ABSTRACT: There are almost no references in the respective publications
with respect to the possibility of the stereo-specific progress
of the reactions of 2-methylcyclohexanone with similar ke-
tones, unless the reduction of the same by metals or complex
metallic hydrides (Reference 2) is added. A mixture of acetylene-
alcohols with prevalently thinly liquid isomer the configuration
of which was not determined, is formed with the condensation
of ketone with acetylene in liquid ammonia. The reaction of
methyl-magnesium-iodide with ethylester of cyclohexanone-
carboxylic-4-acid leads selectively to the ester of the trans-

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Stereochemistry of Nucleophilic Addition to Carbonyl-
Group Reactions of the 2-Methylcyclohexanone

62-58-5-17/27

-1-methylcyclohexanolcarboxylic-4-acid (Reference 4). Trans-2-chlorine-1-methylcyclohexanol (Reference 5) is formed when the interaction of methylmagnesium-iodide with 2-chlorine-cyclohexanone has taken place. With the reduction of the ketone by sodium (Reference 6) or by complex metallic hydrides, (Reference 7), however, the substituent taking place moves into the cis-position with respect to the already present substituent. Thus, the correlation of the cis-and transisomers forming with the reactions, is different. There are 1 figure, 1 table and 12 references, 2 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute for Organic Chemistry imeni N. D. Zelinskiy AS USSR)

SUBMITTED: December 19, 1957

1. Cyclic compounds--Chemical reactions 2. Stereochemistry--Applications
3. Molecular structures--Test methods

Card 2/2

АМЕРИКАНСКИЙ А.В.

30479-28-6-6/63

AUTHORS: Nazarov, I. N. (Deceased), Kamernitskiy, A. V., Achren, A. A.

TITLE: The Most Simple Analogues of Cortic Steroids (Prosteyshiye analogi kortikosteroidov) I. The Stereochemistry of Cyano-hydrin-Acetylene Synthesis. Configuration of the 1-Cyano- and 1-Ethinyl-2-Methylcyclohexanol-1 (I. Stereokhimiya tsiangidrinogo i dsetilenovogo sinteza. Konfiguratsiya 1-tsiano- i 1-etinil-2-metiltsiklogeksanolov-1)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 6, pp. 1458-1469 (USSR)

ABSTRACT: In the condensation of 2-methylcyclohexanone (formula 1) with hydrogen cyanide and acetylene in any case two stereo-isomeric cyanohydrins (one crystalline and one liquid), (II, III) and acetylene alcohols of unknown structure (IV, V) (Ref 3) are formed. It was of interest to the authors to determine the spatial structure of these compounds as well as the stereochemical reaction course of the synthesis of cyanohydrin and acetylene in the series of substituted cyclo-hexanone, which hitherto had not been dealt with. The ob-

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vious synthesis of crystalline derivatives of cyanohydrins

SOV/79-28-6-6/63

The Most Simple Analogues of Cortic Steroids. I. The Stereochemistry of
Cyanohydrin-Acetylene Synthesis. Configuration of the 1-Cyano- and 1-
-Ethynyl-2-Methylcyclohexanol-1

(II) and (III) by saponification to the oxy acids does not easily take place (Refs 2, 4, 5), the cyanohydrins decomposing under the regeneration of (I) when the conditions are more stringent (Ref 5). Vel'vart (Ref 6) described a saponification of the cyanohydrin mixture (II) and (III) (Ref 6) in acetic acid saturated with hydrogen chloride, which was improved by the authors. On this occasion the authors obtained from the crystalline cyanohydrin (II) a 2-methylcyclohexanol-1-carboxylic acid (VI) almost quantitatively, with a melting point at 110 .. 111°, and from the liquid isomer (III) the same acid with the melting point at 94-95° (VII). In the oxidation of the crystalline 1-ethynyl-2-methylcyclohexanol (IV) permanganate the higher melting oxy acid (VI) was obtained as well, and in this oxidation from liquid 1-ethynyl-2-methylcyclohexanol (V) the low melting oxy acid was obtained. This way the authors proved the formation of two isomeric cyanohydrins of the 2-methylcyclohexanol (II) and (III) in the cyanohydrin synthesis as well as their configurative connection with the acetylene alcohols (IV) and

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SCV/79-28-6-6/63

The Most Simple Analogues of Cortic Steroids. I. The Stereochemistry of
Cyanohydrin-Acetylene Synthesis. Configuration of the 1-Cyano- and 1-
-Ethynyl-2-Methylcyclohexanol-1

(V). Thus the stereochemistry of the binding reactions of
hydrogen cyanide and acetylene to the 2-methylcyclohexanone
was investigated and the configuration of the obtained
1-cyano-2-methyl-cyclohexanols and their derivatives (oxy
acids, ketenes etc.) was determined. There are 24 references,
3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR
(Institute of Organic Chemistry, AS USSR)

SUBMITTED: July 18, 1957

1. Acetylenes--Synthesis

Card 3/3

AUTHORS: Hazarov, I. N., (Deceased), Akhrem, A. A., SOV/79-28-7-17/64
Kamernitskiy, A. V.

TITLE: Stereochemical Investigations in the Field of Cyclic Compounds
(Issledovaniye v oblasti stereokhimii tsiklicheskih soyedineniy)
28. The Spatial Direction of the Serini Reaction in the Series
of Cyclohexane (28.Prostranstvennaya napravlennost' reaktsii
Serini v ryadu tsiklogeksana)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7, pp. 1805 - 1810
(USSR)

ABSTRACT: The author realized for the first time the reaction of the
cyclohexanone cyanohydrine as well as of the cis- and trans-
cyanohydrines of 2-methylcyclohexanone with magnesium methyl
iodide with preceding protection of the hydroxyl group of the
cyano-hydrines by vinyl-ethyl ether. The reaction of the cyano-
hydrines with this ether was carried out in the presence of an
ether solution of hydrogen chloride with the corresponding
acetals (formula II) being obtained. On the action of magnesium
methyl iodide on these acetals acetyl cyclohexanols (III) were
obtained. The stereoisomeric hexanols (IV) and (VII) were re-
duced by the aluminum isopropylate in toluene solution, with

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Stereochemical Investigations in the Field of Cyclic Compounds. 28. The Spatial Direction of the Serini Reaction in the Series of Cyclohexane SOV/79-28-7-17/64

only a hexanol (V) in crystal form being obtained from the cis-ketene (IV) and the liquid hexanol (VIII) from the trans-ketene (VII). The compounds (V) and (VIII) after partial acetylation lead to the monoacetates (VI) and (IX). These and other experiments showed that in the synthesis of the stereoisomeric 1-(α -oxyethyl)-2-methyl-cyclohexanols this reaction according to Serini in the cyclohexane series takes place stereospecifically, and that it leads to a change of the configuration. There are 14 references, 6 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry, AS USSR)

SUBMITTED: July 8, 1957

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Stereochemical Investigations in the Field of Cyclic Compounds. 28. The Spatial Direction of the Serini Reaction in the Series of Cyclohexane SOV/79-28-7-17/64

1. Cyclic compounds--Chemical reactions
2. Cyclohexane--Chemical reactions
3. Stereochemistry

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SOV/20-120-4-25/57

AUTHORS: Batuyev, M. I., Akhrem, A. A., Matveyeva, A. D.,
Kamernitskiy, A. V., Nazarov, I. N., Member, Academy of
Sciences, USSR (Deceased)

TITLE: Optical Investigation of the Conformations of Some Gem-Sub-
stituted Cyclohexanes (Opticheskoye issledovaniye konfor-
matsiy nekotorykh gem-zameshchennykh tsiklogeksanov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 120, Nr 4, pp. 779-782
(USSR)

ABSTRACT: The physical properties and the reactivity of the functional
group depend on its position and conformation. The position
can be axial or equatorial. This can sometimes be determined
chemically but frequently only by means of physical methods
(Refs 1, 2). The authors deal with the optical determination
of the conformation of epimeric 2-methyl-1-ethynyl cyclo-
hexanols (I), (II), furthermore, with that of 1,2-dimethyl
cyclohexanols (III), (IV) which they had already earlier
synthesized (Ref 3); the method is described in short and a
survey of publications is given (Refs 3, 4). Formerly the
acetylene alcohols (I) and (II) were traced back by the

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SOV/20-120-4-25/67

Optical Investigation of the Conformations of Some Gem-Substituted Cyclohexanes

authors to the well known pair of cis- and trans-carbinols (III) and (IV) without touching the asymmetric center (Ref 3). The physical properties of the produced compounds (I) - (IV) are shown in table 1. The spectra of the combination light dispersion in the liquid phase were taken on the spectrogram ISP -51 of a mercury lamp having a chamber of the exciting blue line of 4358 Å. The numerical results of these measurements are given together with data on the intensity of the lines. Furthermore, spectra were taken of 10% solutions of the first 2 substances in carbon tetrachloride. The presence of the 2 isomers I and II and of their solutions in CCl₄ in the spectra in the range of 3 - 4 (instead of only one)⁴ characteristic frequencies of other weak lines (Table 2) tends to show, that other conformations are present in small numbers (possibly even in bath-tub shape) in the mixture where conformations prevail. The prevailing conformation in the cis-isomer (I) is "ae" (according to Ref 1) whereas in the trans-isomer it is "ee" (see scheme). In the ae-conformation the influence of the cycle on the hydroxyl group in the equatorial position is more intensive than in "ee", where it is in axial position. In the ae-conformation the

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hydroxyl group is more protonized than the axial group in "ee". On the other hand the bindings $\text{C}\equiv\text{C}$, $\text{C}-\text{C}$ in $-\text{C}\equiv\text{CH}$ in the equatorial position which they take in the "ee" conformation are more amply supplied with electrons. That means they have higher oscillation frequencies, binding energies and a shorter interatomic distance than they would have in an axial position in an "ae" conformation. (Refs 1, 6). The interaction between reactivity and conformation in the series of cyclohexane derivatives was already at an earlier time observed by the authors. (Ref 7). Cis- α -ketole (V) which was obtained from an equatorial acidous hydroxyl can be acylated under milder conditions than trans- α -ketole (VI) which was produced from (II) with the hydroxyl being in an axial position. There are 2 tables and 7 references, 4 of which are Soviet.

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SOV/20-120-4-25/67

Optical Investigation of the Conformations of Some Gem-Substituted Cyclohexanes

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR
(Institute of Organic Chemistry AS USSR).
Institut goryuchikh iskopavemvkh Akademii nauk SSSR
(Institute of Mineral Fuels AS USSR)

SUBMITTED: February 15, 1958

1. Cyclohexanes--Optical analysis 2. Cyclohexanes--Physical
properties 3. Substitution reactions 4. Hydroxyl radicals
--Chemical effects

Card 4/4

5(4)

AUTHORS:

Batuyev, M. I., Akhrem, A. A.,
Kamernitskiy, A. V., Matveyeva, A. D.

SOV/62-59-3-31/37

TITLE:

Optical Investigation of the Conformations of the Cis- and Trans-methyl Esters of 3-Methyl Cyclohexanol Carboxylic Acids (Opticheskoye issledovaniye konformatsiy tsis- i trans-metilovykh efirov 3-metiltsiklogeksanolkarbonovykh kislot)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 3, pp 556-558 (USSR)

ABSTRACT:

This is a brief communication on the investigation of the cis- and trans-methyl esters of 3-methyl cyclohexanol carboxylic acids which were synthesized according to the scheme described in reference 1. The physical properties of the products obtained are given in the table. It is known that the Auers-Skit formula for the cis- and trans-configurations of 1,3-disubstituted cyclohexanes may be applied in the reversible form. The same holds also for the esters investigated: the cis-compound has a lower density and a smaller refraction index than the trans-compound. The Raman spectra of the esters were recorded in the liquid phase by means of the ISP-51 spectrograph with a medium camera of the exciting line 4358 of the

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Optical Investigation of the Conformations of the SOV/62-59-3-31/37
Cis- and Trans-methyl Esters of 3-Methyl Cyclohexanol Carboxylic Acids

quartz lamp. The cis- and trans-methyl esters of 3-methyl cyclohexanol carboxylic acids investigated are mixtures of reversible isomers $1e3e \rightleftharpoons 1a3a$ and $1e3a \rightleftharpoons 1a3e$. In the second conformation $1e3a$ mainly the first $1e3e$ is present. Moreover, in each of these mixtures admixtures of one conformation are contained in the other. There are 1 table and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut goryuchikh iskopayemykh Akademii nauk SSSR (Institute of Mineral Fuel of the Academy of Sciences, USSR). Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: July 30, 1958

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5(3)
 AUTHORS: Kamernitskiy, A. V., Akhrem, A. A. SOV/62-59-4-30/42

TITLE: Effect of the Medium on the Stereochemistry of the Reactions of Nucleophilic Addition to the Carbonyl Group (Vliyaniye sredy na stereokhimiyu reaktsiy nukleofil'nogo prisoyedineniya k karbonil'noy gruppe)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 740-742 (USSE)

ABSTRACT: This is a brief report on the investigation of the cyanohydride synthesis. In addition to the cyanohydride synthesis by recyanization already described (Refs 1-3), the interaction of ketone (III) with potassium cyanide and hydrochloric acid in aqueous methanol and with anhydrous hydrogen cyanide in the presence of potash in absolute ether was investigated. Thus the cyanohydrine synthesis was carried out in ionogenic media (methanol, acetone, water) as well as in non-ionogenic media. The mixtures of cyanohydride (I) and (II) obtained were saponified with hydrochloric and acetic acid in the mixture of cis- and trans-oxy acids (VIII) and (IX) under similar conditions. The latter were methylated by means of diisomethine.

Card 1/2 The table shows the effect of the reaction conditions on

Effect of the Medium on the Stereochemistry of the SOV/62-59-4-30/42
Reactions of Nucleophilic Addition to the Carbonyl Group

the steric tendency of the cyanohydrine synthesis with 2-methylcyclohexanone. The steric selectivity of the cyanohydrine synthesis is approximately similar in the first and second case (ionogenic conditions) and becomes slightly weaker under non-ionogenic conditions at the same time approaching the tendency of the acetylene synthesis. However, in this case, too, the formation of the cis-isomer dominates in contrast to the Grignard reaction. There are 1 table and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: July 31, 1958

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5(3)

AUTHORS:

Akhrem, A. A., Kamernitskiy, A. V.

SOV/62-59-4-34/42

TITLE:

Stereochemistry of the Reactions of the Nucleophilic Addition to the Carbonyl Group of 3-Methylcyclohexanone (Stereokhimiya reaktsii nukleofil'nogo prisoyedineniya po karbonil'noy gruppe 3-metiltsiklogeksanona)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, pp 748-750 (USSR)

ABSTRACT:

In the investigation of the stereochemistry of the addition of hydrocyanic acid, acetylene, and methyl magnesium iodide to 2-methyl-cyclohexanone (1) a certain, although varying steric selectivity was found (Refs 1-3). In order to find out whether the discovered peculiarities of the steric tendency remain valid also with other examples the stereochemistry of the cyanohydrine synthesis and Grignard reaction was investigated in this work on 3-methylcyclohexanone (II) as an example. The cyanohydrine synthesis carried out on the basis of 3-methylcyclohexanone by means of acetone cyanohydrine (Ref 1) yielded a liquid mixture of 3-methylcyclohexanone-(VIII)-cyanohydrine. By saponifying this mixture a mixture of trans- and cis-3-methylcyclohexanol carboxyl-1-acids (IX)

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Stereochemistry of the Reactions of the Nucleophilic Addition to the Carbonyl Group of 3-Methylcyclohexanone SOV/62-59-4-34/42

and (X) was obtained. This mixture contains about 75 % trans-oxyacid (IX) and 25 % cis-oxyacid (X). The configuration of the oxyacids (IX) and (X) was proved by their reduction to 1,3-dimethylcyclohexanols (III) and (IV) without touching the asymmetrical centers. A mixture of alcohols (III) and (IV) was obtained from the reaction of the ketone (II) with methyl magnesium iodide. This mixture consists of 40 % trans-alcohol (III) and 60 % cis-alcohol (IV). It was found that the steric tendency of the cyanohydrine synthesis and Grignard reaction is similar to that appearing in the case of 2-methylcyclohexanone. There are 1 table and 13 references, 8 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: August 8, 1958

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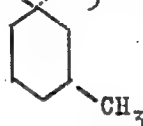
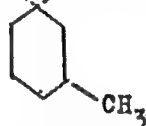
SOV/62-59-9-26/40

AUTHORS: Batuyev, M. I., Akhrem, A. A., Kamernitskiy, A. V., Matveyeva, A. D.

TITLE: Optical Investigation of the Conformations of Cis and Trans-1,3-dimethylcyclohexanols

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 9, pp 1668-1670 (USSR)

ABSTRACT: A reaction scheme for the synthesis of the substances investigated, (I) OH-CN and (II) OH-CH₃ is given from a previous paper.



The Auer-Skit transformation rule is valid for compounds (I) and (II) (Table). The Raman spectra of the compounds were taken in the liquid phase and in carbon tetrachloride solution. From the data obtained, the following conclusions were drawn: The alcohols form intermolecular hydrogen bonds in solution (bands split up into lines in the 3160-3530 cm⁻¹ range). These hydrogen bonds do not

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Optical Investigation of the Conformations of
Cis and Trans-1,3-dimethylcyclohexanols

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stem from the hydroxyl group. In the liquid phase complexes are formed by hydrogen bonding of the OH-group (continuous bands in the 3600 and 3614 cm^{-1} region). The hydroxyl groups generally have a similar position (equatorial) in the associated complex. Thus, in (I) their position is cis-1a3a and in (II) trans-1a3e. Their position was determined at cis-1e3e in (I) and trans-1a3e and trans-1e3a in (II) (equatorial and equatorial-axial), relative to the CH_3 -group outside the hydrogen bond as the largest substituent. If one disregards the nomenclature of these configurations and conformations by reason of their formation, and regards solely their real structure, deduced from their physical properties, as well as taking into account the transformation rule by Barton and Hassel (the configuration is determined by the position of the largest substituent) one would have to redefine the cis-1a3a conformation of (I), the form predominant in associated molecules, of (I), and also the

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Optical Investigation of the Conformations of
Cis and Trans-1,3-dimethylcyclohexanols ..

SOV/62-59-9-26/40

trans-1a3e conformation of (II). The nomenclature of these conformations would then be trans-1e3a and cis-1e3a respectively. There are 1 table and 3 Soviet references.

ASSOCIATION: Institut goryuchikh iskopayemykh Akademii nauk SSSR
(Institute for Combustible Mineral Resources of the Academy of Sciences, USSR). Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: January 21, 1959

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5.3400,5.3900

78254
SOV/79-30-3-2/69

AUTHORS: Kamernitskiy, A. V., Akhrem, A. A.

TITLE: The Simplest Analogs of Corticosteroids. IX.
Stereochemistry of Nucleophilic Addition to the
Carbonyl Group. 6. Steric Course of Cyanohydrin
and Metallo-Organic Synthesis Based on 3-Methylcyclo-
hexanone

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3,
pp 754-764 (USSR)

ABSTRACT: It was established previously (this journal, 1958,
Vol 28, p 1458; 1955, Vol 25, p 1345) that 2-methyl-
cyclohexanone (I) in reaction with acetone cyanohydrin
yields a mixture of cyanohydrins consisting of 75-80%
cis forms, and 25-20% trans forms, and that the acetylene
synthesis with (I) under pressure gives a mixture of
60% cis and 40% trans isomers, whereas (I) in reaction
with methylmagnesium iodide gives 25% cis and 75% trans
forms. The preliminary investigation of the above
reactions in application to 3-methylcyclohexanone
(Izv. AN SSSR, 1959, p 748, abstract 71916) showed

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The Simplest Analogs of Corticosteroids.
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that the steric course of these reactions is analogous to that observed for 2-methylcyclohexanone¹. In the present study, 3-methylcyclohexanone in reaction with acetone cyanohydrin gave a mixture of 1-cyano-3-methylcyclohexanols consisting of 25% cis and 75% trans forms; the reaction with methylmagnesium iodide yielded a mixture of 1,3-dimethylcyclohexanols consisting of 60% cis and 40% trans forms. These and other reactions of 3-methylcyclohexanone and its derivatives confirmed the formerly advanced theory that cyanohydrin and acetylene synthesis with 3-methylcyclohexanone leads to a predominance of ae-conformation, and the metallo-organic synthesis, to the predominance of ee-conformation. In the first instance, the cis form is obtained owing to the predominance of the introduction of axial H, CN, or C \equiv CH substituents; in the second instance, the introduction of equatorial CH₃ substituent leads to the predominance of the trans form. It was suggested that the introduction of the substituents in the axial position is determined by the polar orientation of the nucleophilic reagent which depends on the mechanism

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of the ionic reaction of the nucleophilic addition; the introduction in the equatorial position depends on the steric hindrances due to the axial meta-substituents (including also the hydrogen atoms). There are 2 tables, and 29 references, 7 U.S., 4 U.K., 3 French, 1 Belgian, 2 Swiss, 2 German, 10 Soviet. The 5 most recent U.S. and U.K. references are: D. S. Noyce, D. B. Denney, J. Am. Chem. Soc., 72, 5743 (1959); D. H. Barton, R. Cookson, Quart. Revs., 10, 44 (1956); E. L. Eliel, R. G. Haber, J. Org. Chem., 23, 2041 (1958); R. O. Clinton, R. G. Christiansen, H. C. Neumann, S. C. Iaskowski, J. Am. Chem. Soc., 80, 3389 (1958); G. F. Hemmion, F. X. O'Shea, *ibid.*, 80, 614 (1958).

ASSOCIATION: Institute of Organic Chemistry, Academy of Sciences
USSR (Institut organicheskoy khimii Akademii nauk
SSSR)

SUBMITTED: May 14, 1959

Card 3/3

BATUYEV, M.I.; AKHREM, A.A.; KANERNITSKIY, A.V.; MATVEYEVA, A.D.

Optical study of the conformations of cyclohexanone and some of
its derivatives. Dokl.AN SSSR 133 no.5:1077-1080 Ag '60.
(MIRA 13;8)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR i Institut
organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR.
(Cyclohexanone)

Ковалевский, А.В.

Ковалевский, А.В.; Акимов, А.И.

Ковалевский, А.В. Реакции нуклеофильного присоединения к карбонильной группе в органических соединениях. Усп. хим. 30 no.2:145-183 F '61.

(MIRA 14:2)

1. Ученый секретарь химии И.В.Д.Зелинского АН СССР.

(Addition reactions)

(Carbonyl group)

(Ketones)

BATUYEV, M.I.; AKHREM, A.A.; KAMERNITSKIY, A.V.; MATVEYEVA, A.D.

Optical study of conformations of cyclopentanone and α -chloro-
cyclopentanone. Izv.AN SSSR.Otd.khim.nauk no.6:1138-1141 Je '61.
(MIRA 14:6)

1. Institut goryuchikh iskopayemykh AN SSSR i Institut organicheskoy
khimii im. N.D.Zelinskogo AN SSSR.
(Cyclopentanone) (Isomers)

BATUYEV, M.I.; AKHREM, A.A.; KAMERNITSKIY, A.V.; MATVEYEVA, A.D.

Optical investigation of conformations of cyanohydrins of
some derivatives of cyclohexanone. Izv.AN SSSR.Otd.khim.nauk
no.10:1813-1816 O '61. (MIRA 14:10)

1. Institut goryuchikh iskopayemykh AN SSSR i Institut organicheskoy
khimii im. N.D.Zelinskogo AN SSSR.
(Cyanohydrins) (Cyclohexanone)

PENTIN, Yu.A.; SHARIPOV, Z.; KOTOVA, G.G.; KAMERNITSKIY, A.V.; AKHREM, A. A.

Spectroscopic investigation of the conformation equilibrium of
chlorocyclohexane and bromocyclohexane. Zhur.strukt.khim. 4
no.2:194-200 Mr-Apr '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Cyclohexane—Spectra)

AKHREM, A.A.; KAMERNITSKIY, A.V.; PAVLOVA-GRISHINA, N.S.

Stereochemistry of the reactions of nucleophilic addition to the carbonyl group of cyclic ketones. Report No.5: Stereochemistry of cyanohydrin synthesis with 2-chlorocyclohexanone. Izv.AN SSSR.Otd.khim.nauk no.6:1050-1056 '62. (MIRA 15:8)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.
(Cyanohydrins) (Cyclohexanone)

KASAL, A.; POLAKOVA, A.; KAMERNITZKY, A. V. [Kamernitskiy, A. V.];
LABLER, L.; CERNY, V.

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My '63.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague (for Kasal, Labler and Cerny).
2. Institute of Natural Drugs, Prague (for Polakova).
3. Institute of Organic Chemistry, Academy of Sciences U.S.S.R, Moscow (for Kamernitzky)

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Thermal isomerization in the 16 α , 17 α -dihydroxy 20-keto
steroid series. Izv. AN SSSR. Ser. khim. no.12:2237-2238
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AKHREM, Afanasiy Alekseyevich; DUBROVSKIY, V. A.; KAMERNITSKIY, A. V.

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Report presented for the 3rd Intl. Symposium on the Chemistry of
Natural Products (IUPAC), Kyoto, Japan, 12-18 April 1964.

DUBROVSKIY, V.A.; AKHREM, A.A.; KAMERNITSKIY, A.V.

Transformed steroids. Report No.4: Synthesis, properties and transformations of 3β , 16α , 17α -trihydroxy- Δ^5 -pregnen-20-one. Izv.AN SSSR. Ser.khim. no.1:103-111 Ja '64. (MIRA 17:4)

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PROKHODA, A.M.; KAMERNITSKIY, A.V.; AKHREM, A.A.

Stereochemistry of the reactions of nucleophilic addition to a carbonyl group. Report No.6: Reactions of 3-tert-butylcyclohexanone. Izv. AN SSSR. Ser. khim. no.6:1060-1068 Je '64.
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1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

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Mechanism of cis-opening of α -ketoxides. Izv. AN SSSR. Ser. khim. no. 9:
1726-1727 S '64. (MIRA 17:10)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

AKHREM, A.A.; KAMERNITSKIY, A.V.; DUBROVSKIY, V.A.; NOISEVNIKOV, A.M.

One-stage synthesis of cis-diols from α -keto oxides. Izv. AN SSSR
Ser. khim. no.1:202-203 '65. (MIRA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

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New single-stage way of synthesizing steroid cis-16 α ,17 α -diols
from keto oxides. Dokl. AN SSSR 162 no.4:811-813 Je '65. (MIRA 18:5)

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1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

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New training and scientific research building in the Allan
Institute of the McGill University. 'Bar. nev. 1 parkh.
64 no.8:1268-1269 '64. (MIRA 17:12)

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SO: LETOPIS' No. 30, 1949

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Vodoprovodnykh Trub"

M-L Stroyizdat 1950 140 pages

KAMERSHTEIN, A. G.

ARONOV, R. I. - Kand. tekhn. nauk dots. Nauchno - issledovatel'skiy institut
po stroitel'stvu Ministerstva Neftyanoy promyshlennosti i KAMERSHTEIN, A. G. -
Kand. Tekh. Nauk.

Izucheniye prichin vibratsii gazoprovodov i razrabotka meropriyatiy po ikh
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zashchemleniya v grunte. Page 86

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KAMERSHTEYN, A. G.

Pipelines

Compensating temperature tension in steel pipe lines laid into the ground. Stroi. prom. 30, No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, ~~1953~~, Uncl.

ARONOV, R.I., kand.tekhn.nauk, dots., laureat Stalinskoy premii; KAMERSHTEYN,
A.G., kand.tekhn.nauk, laureat Stalinskoy premii

Choking of pipelines in the soil and characteristics of their
operation in mining areas. Trudy VNIISTroinefti no.5:35-53
'53. (MIRA 12:2)
(Pipelines) (Strains and stresses) (Subsidences (Earth movements))

KAMERSHTEYN, A.G., kand. tekhn. nauk, laureat Stalinskoy premii

Investigating the performance of a U-shaped expansion piece
having a 426 mm cross section and welded elbows. Trudy
VNIISTroinefti no.5:72-84 '53. (MIRA 12:2)
(Pipe-fittings)

SOV/124-57-3-3696

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 150 (USSR)

AUTHOR: Kamershteyn, A. G.

TITLE: An Investigation of the Flexibility and Strength Characteristics of Expansion Joints Having Welded, Bent, Short-radius, and Pleated (Corrugated) Elbows (Issledovaniye gibkosti i prochnostnykh kharakteristik kompensatorov so svarnymi, gnutymi, krutozagnutymi i skladchatymi kolenami)

PERIODICAL: Tr. Vses. n.-i. in-ta po str-vu ob"yektov neft. i gaz. prom-sti, 1954, Nr 6, pp 31-46

ABSTRACT: The article adduces the methodology and results of experimental investigations of the rigidity of portal-shaped expansion joints with welded, bent, and pleated (corrugated) elbows. The author establishes that welded bends are not absolutely rigid as had been assumed. A deduction is made that pleated (corrugated) bends do not possess any greater flexibility than do smooth ones. The use of short-radius ells is recommended.

S. A. Ivanov

Card 1/1

KAMERSHTEYN, A.G., kandidat tekhnicheskikh nauk, laureat Stalinskoy
premi.

Use in pipelines of compensators having welded and sharply
bent elbows. Stroi.prom.32 no.11:8-12 N '54. (MLRA 7:11)
(Pipelines)

KAMERSHTEYN, I.G., laureat Stalinskoy premii; PETROV, I.P., laureat
~~Stalinskoy premii.~~

Building steel pipelines constructed of spiral welded pipes.
Stroi.prom.32 no.12:36-40 D'54. (MLRA 8:3)
(Pipe, Steel)(Pipelines)

KAMERSHTEYN, A.G.

PETROV, I.P., laureat Stalinskoy premii; KAMERSHTEYN, A.G., laureat Stalinskoy premii; DOLGOV, V.K., laureat Stalinskoy premii; SNITKO, I.K., kandidat tekhnicheskikh nauk, redaktor; TOKER, A.M., tekhnicheskii redaktor

[Calculation of steel pressure pipe strength] Raschet napornykh stal'nykh truboprovodov na prochnost'. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1955. 165 p. (MIRA 8:7)
(Pipe, Steel)

AID P - 3878

Subject : USSR/Engineering

Card 1/1 Pub. 28 - 6/7

Author : Kamershteyn, A. G.

Title : Use of Spiral-Welded Tubing in Steam-pipe Lines

Periodical : Energ. byul., 11, 26-28, N 1955

Abstract : Because hundreds of kilometers of piping are required in construction of a refinery, economy of the metal used in steam-pipe lines must be given serious consideration, particularly for the large and thick tubing. The author describes results of tests conducted by the All-Union Scientific Research Institute for Building of Petroleum Enterprises (VNIISTroyneft') on the strength and endurance of steel spiral-welded pipes 529 mm in diameter and 7 to 8 mm thick, to replace the conventional thicker pipes. Four graphs and 1 table.

Institution : As mentioned.

Submitted : No date

Kamershteyn, A. G.

137-1957-12-23780

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 131 (USSR)

AUTHOR: Kamershteyn, A. G.

TITLE: The Dimensional Grading of Pipes Required for the Construction of Oil-gas Trunk Lines (Trebovaniya k sortamentu trub pri stroitel'stve magistral'nykh neftegazoprovodov)

PERIODICAL: V sb.: Ratsionalizatsiya profilей prokata, Moscow, Profizdat, 1956, pp 231-241

ABSTRACT: Modern arterial pipe lines consisting of pipes (P) of 500-900 mm in diameter must be designed for pressures of 50-60 at. This determines the peak requirements for the strength of P's. However, the assortment (A) of P's turned out by the metallurgical industry does not meet the demands of the petroleum industry, which results in an unwarranted excessive expenditure of metal (M) and in increased construction costs. For the purpose of conserving M investigations were conducted which rendered unnecessary the consideration of the oval shape P in the static analysis of pipe lines, and which made possible a decrease in the thickness of the pipe walls by 2-3 mm. Of decisive importance toward the

Card 1/2

KAMERSHTEYN, A.G., kandidat tekhnicheskikh nauk.

Extensive use of sharply bent elbows prepared in the shop. Strel.pred.
neft.prem. 1 no.2:20-23 Ap '56. (MLRA 9:9)
(Pipe bending)

KAMERSHTEYN, A.G., kandidat tekhnicheskikh nauk (Moskva)

~~peredelat tekhnicheskuyu karte~~

Technical instructions for determining the depth of laying main
pipelines. Strel.pred.neft.prom.1 no.5:12-14 J1 '56.(MIRA 9:9)
(Petroleum--Pipelines)

KAMERSHTEIN, A.G., kandidat tekhnicheskikh nauk; IVANOVA, K.Ye., inzhener.

All-Union conference of pipe industry workers. Stroi.pred.neft.
prom. 1 no.7:26-27 S '56. (MLRA 9:10)

(Pipe)

KAMERSETEYN

Factory produced elbows and couplings. Ved.1 san.tekh.no.9:4-7
S '56. (Pipe fittings) (MLRA 9:10)

~~TAMERSHTEIN~~, Anatoliy Grigor'yevich, kandidat tekhnicheskikh nauk;
SNITKO, I.K., kandidat tekhnicheskikh nauk, nauchnyy redaktor;
NINEMYAGI, D.K., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiiy redaktor

[Laying of pipelines in mining regions] Stroitel'stvo trubo-
provodov v raionakh gornykh razrabotok. Moskva, Gos.izd-vo lit-ry
po stoit. i arkhitekt., 1957. 147 p. (MIRA 10:6)
(Pipelines)

KAMERSHTEYN, A.G., kandidat tekhnicheskikh nauk.

Possibilities of savings in metal during the construction of pipelines. Strel. prod. neft. prom. 2 no.2:5-7 F '57. (MLRA 10:4)
(Petroleum--Pipelines)

KAMERSHTEYN A.G., kandidat tekhnicheskikh nauk.

Hydraulic resistance of welded, sharply bent, and folded elbows.
Stroi.prom. 2 no.6:9-11 Ja '57. (MIRA 10:7)
(Pipe--Testing)

Kamershteyn, A.G.
KAMERSHTEYN, A.G., kandidat tekhnicheskikh nauk.

Achievements of Soviet science in the construction of main
pipelines. Stroi.pred.neft.prom.2 no.10:7-11 O '57. (MIRA 10:10)
(Pipelines)

Kamershteyn, A. G.

AUTHORS: Kamershteyn, A. G., Candidate of Technical Sciences, and Gal'perin, A. I., Candidate of Technical Sciences 95-11-3/14

TITLE: Gas Pipelines Made From Asbestos-Cement Tubes (Gazoprovody iz azbestotsementnykh trub).

PERIODICAL: Stroitel'stvo Predpriyatiy Neftyanoy Promyshlennosti, 1957, ²Nr 11, pp. 9-12 (USSR).

ABSTRACT: In connection with the increased dimensions in the building of pipelines, the problem of using non-metallic substances for the production of pipes has gained considerably in importance economically. In some cases asbestos-cement has become fully equivalent to metal both from a technical and economic point of view. The asbestos-cement tubes are highly resistant not only with respect to corrosion but also as regards corroding substances contained in the products to be transported. Steel tubes are very soon destroyed by these corrosive substances. The asbestos-cement tubes used are not able to meet present-day requirements either as regards quality or extent of production. As a result of an investigation it was found that the shape and geometrical order of magnitude of the pressure tubes produced in accordance with present-day standards

Card 1/3

Gas Pipelines Made From Asbestos-Cement Tubes.

95-11-3/14

must be changed; in this way a saving of material will be attained. Examination of the tubes as to cracks caused by internal hydrostatic pressure showed that the tube is considerably weakened by the turning-off of the ends. It was found that tubes are usually destroyed at the turned-off ends. Investigations and calculations showed that in an oval tube pressure is 22% higher than in a round tube, which means that the durability of the tube is reduced by 22%. In view of the deficiencies found in asbestos-cement tubes produced at present, the research institute for asbestos-cement worked out a new and improved method of constructing such tubes. Tests of the durability of asbestos-cement tubes with a diameter of 450 mm (fig.5), which were carried out in the factory where the tubes were produced, showed, that the tubes are able to withstand a pressure of 22-27 atm. superpressure without any signs of destruction becoming noticeable, and that the elasticity modulus of asbestos-cement is more than double that of ordinary tubes. The tubes tested were found to be so strong that it was impossible to destroy them on a test stand. As a result of the various tests carried out at research institutes these tubes were recommended for the construction of an experimental gas pipeline with a diameter of 450 mm along a distance of 30 km.

Card 2/3